WHAT IS CLAIMED IS:

1. A storage apparatus that operates in response to commands from a computer, the storage apparatus comprising:

a storage region; and

a control unit that operates in response to a first command that correlates a first storage region in the storage region to a second storage region in the storage region, and allows in response to a read instruction to read data in the second storage region copying of the data from the first storage region to the second storage region, and a second command that dissolves the correlation between the first storage region and the second storage region.

2. A storage apparatus according to claim 1, wherein, when controlling the copying of data, the control unit reads data from the first storage region, outputs the data read to the computer, and then writes the data read to the second storage region.

3. A storage apparatus according to claim 1, wherein, when there is data copied from the first storage region to the second storage region, the control unit invalidates the data in response to the first command.

4. A storage apparatus according to claim 1, wherein the first

command is a command that allows copying of data from the first storage region to the second storage region in response to a write instruction to the second storage region.

5. A storage apparatus according to claim 4, wherein the control unit writes data designated by the write instruction on the data copied to the second storage region.

6. A storage apparatus according to claim 5, wherein the control unit controls in response to the second command to copy the data designated by the write instruction and written in the second storage region to the first storage region.

7. A storage apparatus according to claim 4, wherein the control unit controls in response to the second command to copy the data from the first storage region to a region in the second storage region where data is not copied from the first storage region.

8. A storage apparatus according to claim 1, wherein the control unit controls in response to the second command to copy the data from the first storage region to a region in the second storage region where data is not copied from the first storage region.

9. A storage apparatus according to claim 1, wherein the control

unit generates in response to the first command management information to manage correlation between the first storage region and the second storage region, and release the management information in response to the second command.

10. A storage apparatus according to claim 1, wherein the control unit includes a control module that is responsive to a third command to control copying data from the first storage region to a region of the second storage region where data is not copied from the first storage region and dissolving the correlation between the first storage region and the second storage region.

11. A storage apparatus according to claim 10, wherein the control unit is responsive to the second command and the third command selectively issued from the computer.

12. A storage apparatus that operates in response to commands from a computer, the storage apparatus comprising:

a storage region; and

a control unit that operates in response to a first command that causes a first storage region within the storage region to be correlated to a second storage region within the storage region, allows in response to a read instruction to read data in the second storage region copying of the data from the first storage region to the second storage region, allows in

response to a write instruction to the second storage region writing of data instructed in the write instruction to the second storage region, and controls copying the data written in the second storage region to the first storage region.

13. A storage apparatus according to claim 12, wherein, when controlling the copying of the data in response to the read instruction, the control unit reads the data from the first storage region, outputs the data read to the computer, and then writes the data read in the second storage region.

14. A storage apparatus according to claim 12, wherein the control unit controls the copying of the data written in the first storage region in response to a second command.

15. A storage apparatus according to claim 12, wherein the control unit controls in response to the first command copying of data of the first storage region to the second storage region designated by the write instruction before writing the data designated by the write instruction.

16. A storage apparatus according to claim 12, wherein, when there is data copied from the first storage region to the second storage

region, the control unit controls in response to the first command to invalidate the data copied.

17. A storage apparatus according to claim 12, wherein the control unit is responsive to a third command to control dissolving of the correlation between the first storage region and the second storage region.

18. A storage apparatus according to claim 17, wherein the control unit generates in response to the first command management information to manage correlation between the first storage region and the second storage region, and dissolves in response to the third command the management information.

19. A storage apparatus comprising:

a storage region; and

a control unit that controls transfer between a first control state that correlates a first storage region within the storage region to a second storage region within the storage region and allows in response to a read instruction to read data in the second storage region copying of the data from the first storage region to the second storage region and a second control state that dissolves the correlation between the first storage region and the second storage region.

20. A storage apparatus according to claim 19, wherein, when

controlling the copying of data, the control unit reads data from the first storage region, outputs the data read to a host computer, and then writes the data read to the second storage region.

21. A storage apparatus according to claim 19, wherein the control unit controls, in the first control state, in response to a write instruction to the second storage region, to allow copying of data from the first storage region to the second storage region.

22. A storage apparatus according to claim 19, wherein, when transferring from the first control state to the second control state, the control unit controls copying of data from the first storage region to a region in the second storage region where data is not copied from the first storage region.

23. A storage apparatus according to claim 19, wherein, when transferring from the first control state to the second control state, the control unit controls copying of data from the second storage region to a region in the first storage region where data is not copied from the second storage region.

24. A storage apparatus according to claim 19, wherein, when transferring from the first control state to the second control state, the control unit generates management information to manage correlation

between the first storage region and the second storage region, and when transferring from the second control state to the first control state, the control unit releases the management information.

25. A method for managing a storage apparatus having a storage region, the method comprising the steps of:

in response to a first command from a computer, correlating a first storage region in the storage region to a second storage region in the storage region, and copying data from the first storage region to the second storage region in response to a read instruction from the computer to read the data in the second storage region; and

in response to a second command, dissolving the correlation between the first storage region and the second storage region.

26. A method for managing a storage apparatus according to claim 25, wherein the step of copying the data comprises the steps of reading data from the first storage region, outputting the data read to the computer, and then writing the data read to the second storage region.

27. A method of managing a storage apparatus according to claim 25, wherein, when there is data copied from the first storage region to the second storage region, the data is invalidated in response to the first command.

28. A method of managing a storage apparatus according to claim 27, wherein, in response to a write instruction to the second storage region, data is copied from the first storage region to the second storage region.

29. A method of managing a storage apparatus according to claim 28, wherein data designated by the write instruction is written on the data copied to the second storage region.

30. A method of managing a storage apparatus according to claim 29, wherein, in response to the second command, the data designated by the write instruction and written in the second storage region is copied to the first storage region.

31. A method of managing a storage apparatus according to claim 29, wherein, in response to the second command, the data is copied from the first storage region to a region in the second storage region where data is not copied from the first storage region.

32. A method of managing a storage apparatus according to claim 25, wherein, in response to the second command, the data is copied from the first storage region to a region in the second storage region where data is not copied from the first storage region.

33. A method of managing a storage apparatus according to claim 25, wherein management information to manage correlation between the first storage region and the second storage region is generated in response to the first command, and the management information is released in response to the second command.

34. A method of managing a storage apparatus according to claim 25, wherein the control unit copies data from the first storage region to a region of the second storage region where data is not copied from the first storage region and dissolves the correlation between the first storage region and the second storage region in response to a third command.

35. A method of managing a storage apparatus according to claim 34, further comprising the step of responding to the second command and the third command selectively issued from the computer.

36. A method for managing a storage apparatus having a storage region, the method comprising the steps of:

correlating a first storage region within the storage region to a second storage region within the storage region,;

in response to a read instruction from a computer to read data in the second storage region, copying the data from the first storage region to the second storage region;

in response to a write instruction from the computer to the second

storage region, writing data instructed in the write instruction to the second storage region; and

copying the data written in the second storage region to the first storage region.

37. A method for managing a storage apparatus according to claim 36, wherein the step of copying the data comprises the steps of: reading the data from the first storage region, outputting the data read to the computer, and then writing the data read in the second storage region.

38. A method for managing a storage apparatus according to claim 36, wherein the step of copying the data written to the first storage region is executed in response to a command from the computer.

39. A method for managing a storage apparatus according to claim 36, wherein, before writing the data designated by the write instruction, data of the first storage region is copied to the second storage region designated by the write instruction

40. A method for managing a storage apparatus according to claim 36, further comprising the step of controlling, in response to a command from the computer, when there is data copied from the first storage region to the second storage region, to invalidate the data.

41. A method for managing a storage apparatus according to claim 36, wherein the correlation between the first storage region and the second storage region is dissolved in response to a command from the computer.

42. A method for managing a storage apparatus according to claim 41, wherein the step of correlating the first storage region to the second storage region includes the step of generating management information to manage correlation between the first storage region and the second storage region, wherein the management information is released in response to the command.

43. A method for managing a storage apparatus having a storage region, the method comprising the steps of:

controlling transfer between a first control state in which a first storage region within the storage region is correlated to a second storage region within the storage region and a second control state in which the correlation between the first storage region and the second storage region is dissolved; and

in the first control state, in response to a read instruction to read data in the second storage region, copying the data from the first storage region to the second storage region.

44. A method for managing a storage apparatus according to

claim 43, wherein the step of copying the data includes the steps of reading the data from the first storage region, outputting the data read to a host computer, and then writing the data read to the second storage region.

45. A method for managing a storage apparatus according to claim 43, wherein, in the first control state, in response to a write instruction to the second storage region, data is copied from the first storage region to the second storage region.

46. A method for managing a storage apparatus according to claim 43, wherein, when transferring from the first control state to the second control state, data is copied from the first storage region to a region in the second storage region where data is not copied from the first storage region.

47. A method for managing a storage apparatus according to claim 43, wherein, when transferring from the first control state to the second control state, data is copied from the second storage region to a region in the first storage region where data is not copied from the second storage region.

48. A method for managing a storage apparatus according to claim 43, wherein, when transferring from the first control state to the

second control state, management information to manage correlation between the first storage region and the second storage region is generated, and when transferring from the second control state to the first control state, the management information is released.

49. A storage apparatus comprising:

a storage region, wherein a first storage region within the storage region and a second storage region within the storage region are correlated and controlled in a first state, and the first storage region and the second storage region are controlled with the correlation therebetween being dissolved in a second state; and

a control unit that selectively executes a first control mode which dissolves the correlation in order to transfer from the first state to the second state and a second control mode which dissolves the correlation after copying data in the first storage region to the second storage region.

50. A storage apparatus comprising:

a storage region, wherein a first storage region within the storage region and a second storage region within the storage region are correlated and controlled in a first state, and the first storage region and the second storage region are controlled with the correlation therebetween being dissolved in a second state; and

a control unit that selectively executes a first control mode which dissolves the correlation in order to transfer from the first state to the

second state and a second control mode which dissolves the correlation after copying data in the second storage region to the first storage region.

51. A storage apparatus comprising:

a storage region;

a memory storing management information; and

a control unit that commonly uses the management information stored in the memory as control information for managing correlation between a first storage region within the storage region and a second storage region within the storage region, and as control information for managing correlation of a data status resulting from accesses to data in the first storage region with a data status resulting from accesses to data in the second storage region, and manages the first storage region and the second storage region that store the data.

52. A method for controlling a storage apparatus comprising the steps of:

controlling primary and secondary volumes as a pair; and

using a logical snapshot management table that indicates which one of the primary and secondary volumes data to be accessed is retained to thereby access to a logical frozen image.